MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

Quest International Fruit and Vegetable Products

Oregon Manufacturing Extension Partnership

Lean Improves Productivity at Givaudan

Client Profile:

Givaudan, formerly known as Quest International Fruit and Vegetable Products, is a manufacturer of dried fruits and vegetables used in formulations primarily for the consumer market. The company employs 45 people at its facility in Silverton, Oregon.

Situation:

Givaudan wished to operate their business with more bottom line emphasis to support stronger financial performance and business growth. While traditional approaches to manufacturing characterized the layout and operation of the facility, the management team's initial exposure to Lean manufacturing concepts and Constraints Theory had helped them recognize the potential for improvement. Issues for improvement included: 1) productivity and throughput improvements in all areas of the manufacturing facility, and 2) the need to develop and include the Hispanic workforce in operational improvement.

Givaudan was a good fit for a U.S. Department of Labor grant awarded to the Oregon Manufacturing Extension Partnership (OMEP), a NIST MEP network affiliate, to bring Lean Enterprise strategies to food processors that also have a contingent of Limited English Proficient employees. This grant provided an extensive array of training and implementation activities, including a) the initial assessment; b) identification and training of 'Lean Champions'; c) Lean training for limited English speaking workers; d) introduction to Lean for Food Processors; e) Value Stream Mapping application, and f) implementation guidance and coaching to direct and facilitate improvements to the production lines.

Solution:

OMEP and professional consultants worked with Givaudan to complete a Lean diagnostic to determine which skill gaps exist in the company's workforce and which areas would be most effective for training. One bilingual 'Champion' was identified to provide leadership, sustainability, and ongoing support for Hispanic workers in the area of Lean manufacturing. Management and staff participated in a Lean manufacturing simulation exercise designed specifically for the industry. Value Stream Mapping (VSM) was applied to the company's processes as the foundation for customized process improvement activities.

The assessment and VSM revealed an inability to 'make to order' and indicated the need to create buffers of inventory to allow for on time delivery. OMEP helped Givaudan set up these buffers for corn production, allowing more efficient processing of this main product and also allowing the company to process additional product orders during the rush period. There was also an improvement in first pass yield and a reduction in existing inventory, as well. OMEP helped Givaudan implement a change in the quality system to allow for a more immediate identification and analysis of the root cause of off-grade quality. Finding the problem sooner enabled them to minimize the amount of inappropriate material produced and held. Set-up reduction training and implementation resulted in shortened changeover



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times. As a result of the preparatory training, Hispanic employees were also fully able to participate in and implement set-up reduction activities. Givaudan also improved their 'order to cash' information flow. The existing process had incompatible software and manual driven components, resulting in redundant work and inaccuracies. With OMEP's help, they invested in a new software package that supplied all the needed elements, eliminating redundancies and manual repetition. This resulted in reducing errors and time to order completion.

As a result of participation in the training, the Spanish speaking employees became more proactive, as well as more interactive with non-Spanish speaking coworkers and management. This included asking leads and coworkers for help as well as offering help. These same employees also participated in a Set-up-Reduction class, something never offered or even considered for the Spanish speaking employees in the past. This brought about significant changes to the way work was performed and dramatically reduced the non-value added time changing over equipment between products.

Results:

- * Increased sales by 30 percent.
- * Increased production capacity by 10 percent.
- * Fulfilled 100 percent of orders during seasonal corn 'rush.'
- * Reduced changeover from 30 minutes to less than 10 minutes.
- * Invested in Lean training and a software system.
- * Created/retained 13 jobs.
- * Improved confidence of employees.

Testimonial:

"OMEP's John Valachovic has been an excellent resource. With his understanding of processes he has been able to provide good advice and solutions. OMEP's bilingual consultant, Michael Schmich, easily identified with Limited English Proficient workers in order for them to gain confidence and move forward with new ways of thinking."

Mark Sheppard, Operations Manager

